

FLOODS.

Continuous heavy rain during the first few days of the month caused floods in parts of southern Missouri, eastern Arkansas, and northern and eastern Texas, which destroyed property to the value of millions of dollars; and during the first decade of the month heavy rain caused streams in central, southern, and western Illinois, and southern Indiana to overflow their banks, entailing considerable damage to farming and railroad property. Reports of the 15th and 16th stated that many of the smaller streams in western Pennsylvania and West Virginia were over their banks and doing much damage; and reports from Carini, Ill., dated the 16th, stated that a portion of that city was flooded and that lowlands were under water by an overflow of the Little Wabash River. A report from Eureka, Cal., dated the 13th, stated that in consequence of the continuous heavy rain the rivers in that vicinity were flooding the lowlands,

sweeping away bridges, and doing other damage, and a report from the same place dated the 24th stated that the Eel River had overflowed its banks, and that a considerable area of the valley was under water. On the 25th a portion of Los Angeles, Cal., was flooded by a rise in the Los Angeles River; portions of the levee were washed away and washouts occurred on the railroads. During the latter part of the month warm rains melted a large amount of snow in the Sierra Nevada and Sierran mountains in northern California, causing streams to overflow their banks, washing away railroad bridges and levees, filling cuts, flooding towns, and causing land slides. The damage was especially heavy in Sacramento, Sonoma, Napa, Solano, and Santa Clara counties, and in the San Joaquin Valley. On the 27th a small portion of Fresno, Cal., was flooded, and the canals in that region overflowed, flooding large tracks of country.

ATMOSPHERIC ELECTRICITY.**AURORAS.**

Yankton, S. Dak.: an almost perfect auroral corona was observed from 8 to 8.20 p. m., 11th. The beams, twelve in number, were of a white light and shot up from near the horizon to the zenith from all quarters of the sky except due south.

Northfield, Minn.: an aurora was observed at 4.35 a. m., 18th, eastern time. The display was evidently an extensive one, as the light was very bright in the horizon, and extended 45° east and west of the north point. A pall of black clouds hung like a curtain over the upper portion of the aurora.

Fort Buford, N. Dak.: an auroral band, in the form of an arch of light gray color, was observed at 10.30 p. m., 18th. At that time the arch had an altitude of 10°, and rose steadily until it reached altitude 20°, when it covered 65° of the horizon between northwest and northeast. The aurora continued into the night. A slight auroral light was observed on the 21st.

Fort Custer, Mont.: a faint aurora was visible in the north from 9.45 p. m. to 11.30 p. m., 20th. The display was in the form of a wavy curtain of a diffuse light which rose to altitude 12°, and extended from azimuth 180° to 216°.

Auroras were observed during the month as follows: 2d, Morris, Minn. 3d, Hess Road Station, N. Y. 11th, Yankton, S. Dak. 17th, Voluntown, Conn.; Davenport, Iowa; Cornish, Eastport, and Orono, Me.; Leicester and Newburyport, Mass.; New England City and Steele, N. Dak.; Scranton and Webster, S. Dak. 18th, Orono, Me.; Northfield, Minn.; Glendive, Mont.; Fort Buford and New England City, N. Dak.; Scranton, S. Dak. 20th, Fort Custer, Mont.; Egg Harbor City, N. J. 21st, Davenport and Wesley, Iowa; Orono, Me.; Moorhead, Minn.; Fort Buford, N. Dak. 23d, Morris, Minn. 28th,

Nashua, N. H. 30th, Era, Idaho. 31st, Morris, Minn.; North Hammond, N. Y.

ZODIACAL LIGHT.

Northfield, Minn., 20th: the zodiacal light is quite brilliant in the western sky at this season of the year. The light has a whitish color and extends half way from the horizon to the Pleiades, its shape being slightly parabolic, with the vertex in the sky, sloping off to the northward. It has been learned that at this season of the year the light is usually quite as brilliant as it is now, and attempts have been made to photograph it here.

THUNDER-STORMS.

No severe or destructive thunder-storms were reported during the month. East of the Rocky Mountains thunder-storms were reported in the greatest number of states and territories, eleven, on the 12th; in eight on the 1st, 2d, and 19th; in five on the 20th, and in from one to four, inclusive, on the 3d to 8th, 10th, 11th, 13th to 16th, 18th, 20th, 22d, 24th, 25th, 28th, 29th, and 31st. No thunder-storms were reported east of the Rocky Mountains on the 9th, 17th, 21st, 23d, 26th, 27th, and 30th.

East of the Rocky Mountains thunder-storms were reported on the greatest number of dates, nine, in Illinois; on eight in Louisiana and Tennessee; on seven in Arkansas, Kansas, and Texas; on from one to six, inclusive, in Alabama, Connecticut, Indiana, Indian Territory, Iowa, Kentucky, Mississippi, Missouri, New York, Ohio, Pennsylvania, and Vermont. In states and territories other than those named no thunder-storms were reported. The only states west of the Rocky Mountains reporting thunder-storms during the month were: California, on the 3d, 17th, 22d, 23d, and 24th; Montana, on the 1st and 29th, and Washington, on the 1st.

MISCELLANEOUS PHENOMENA.**DROUGHT.**

Bermuda, Ala., 31st: owing to dry weather small streams in this section have become dry, which is an unusual occurrence at this season of the year.

Matanzas, Fla.: this month has been remarkable for long continued droughts. The orange crop has been damaged to a considerable extent.

HALOS.

Fort Custer, Mont., 14th: a brilliant solar halo of 22° radius was visible from soon after sunrise until 4 p. m. During a portion of the time, particularly about noon, a second halo of 46° radius was also visible. This halo was partial, the upper segment alone being visible; a parhelic circle passed through

both halos, causing bright parhelia at each point of intersection. A vertical column also passed through the sun, its appearance, with the parhelic circle, dividing the halo of 22° radius into four segments.

Solar and lunar halos were reported in the Atlantic coast states, mostly in New England and the middle Atlantic states, on twenty-two dates. On twenty-one dates rain or snow fell in that region on the dates for which the halos were reported; on twenty dates on the second day; and on eighteen dates on the third day following the halos. In the central valleys halos were reported, mostly north of the thirty-fifth parallel, for twenty-nine dates. On twenty-six dates rain or snow fell on the dates for which the halos were reported; on twenty-six dates on the second day; and on twenty-three dates on the